## **ABSTRACT**

The present invention discloses a color display system. The color display system includes a plurality of light emitting polymer (LEP) optical fibers each formed as plurality of light-emitting segments for emitting a specific color by using a special light emitting polymer. The light emitting segments are arranged as a two-dimensional array with each of the light emitting segments controlled to turn on and off for presenting a color image by turning on a plurality of the light emitting segments. In a preferred embodiment, each of the light emitting segments includes an indium/tin oxide (ITO) layer segment covering the LEP optical fiber wherein each of the ITO segments is connected to an ITO control voltage for turning on and off the light emitting segment.

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